

Title (en)
Magneto-pneumatic timing device

Title (de)
Magneto-pneumatisches Zeitglied

Title (fr)
Temporisateur magnéto-pneumatique

Publication
EP 0604070 B1 19980729 (EN)

Application
EP 93309937 A 19931209

Priority
US 99561092 A 19921222

Abstract (en)
[origin: US5265639A] A magneto-pneumatic timing device is disclosed that provides a pressure signal alternating between a high and a low pressure output signal. The duty cycle may be varied as well as the overall cycle time. A magnetically biased flexible diaphragm divides a chamber into a pair of subchambers and the differential pressure between the subchambers is controlled to cause the flexible diaphragm to pull away from the magnetic bias to one position and to return to its biased position. Control of the output pressure signal is carried out by varying the resistance in certain of the pneumatic passages that are part of the control function for the differential pressure. The device is relatively simple and inexpensive to construct and features very few moving parts, thus it is reliable and capable of high production, low cost manufacture.

IPC 1-7
A61M 1/00; F16K 31/08; G05D 16/16

IPC 8 full level
A61M 1/00 (2006.01); **A61M 1/10** (2006.01); **F16K 7/17** (2006.01); **G05D 16/00** (2006.01); **G05D 16/06** (2006.01)

CPC (source: EP US)
A61M 1/75 (2021.05 - EP US); **F15C 3/04** (2013.01 - EP US); **Y10T 137/2546** (2015.04 - EP US); **Y10T 137/86413** (2015.04 - EP US)

Cited by
US6840918B1

Designated contracting state (EPC)
DE ES FR GB IT

DOCDB simple family (publication)
US 5265639 A 19931130; DE 69320013 D1 19980903; DE 69320013 T2 19990415; EP 0604070 A1 19940629; EP 0604070 B1 19980729; ES 2118912 T3 19981001; JP 2537592 B2 19960925; JP H0712249 A 19950117

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